

# ***Mail.XML Version 27.0***

## **System Messages Specification**

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## Abstract

This document describes the messaging protocol for use by mailers and their consignees. The Mail.XML™ Transaction Protocol defines the roles and responsibilities of Shippers and Consignees and defines the format and method for message exchange. This messaging protocol is designed to be XML and Web-Services compliant.

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## About Mail.XML™

Mail.XML™ is bringing a paradigm change to the industry by increasing business function specific B2B (Business to Business) communication within the industry that supports automation and in the end enables cost avoidance and higher profits through improved competence and effectiveness of communication. Mail.XML is designed to increase efficiency and lower costs by removing many manual data entry processes and enabling quick near real time communication between business partners. Mail.XML currently supports container-based scheduling, pick up and drop off business processes, as well as identifying different business entities responsible for performing different services such as quality of mailing, address correction, and delivery confirmation on a mailing. The core focus of Mail.XML is communication between industry members and from industry to the final mail processing and delivery organization that delivers the mail to the end consumer, e.g., USPS. In the next few versions of Mail.XML the focus moves across mailing supply chain channels, and includes advanced functions such as payment; automated verification; enabling first, second, and third-party communication and incorporating presort planning, printing, and distribution processes.

## What's New in Mail.XML Version 27.0?

With this release, the Mail.XML Messaging Protocol moves to Version 27.0. This release supports structure changes required by mailing industry and Postal Service.

Changes supported by Mail.XML 27.0 include:

- 2704 - Proposal to remove Parcel Select Light Weight.
- 2708 - Proposal to removal of unused eMailPieceSampleGroupID field from Incentive block
- 2709 - Proposal to convert the RateType value of V from FCM Election Mail to Reserved (or remove)
- 2710 - Proposal to Remove enumerations for SampleLarge and SampleSmall
- 2712 - Proposal to Remove unused Election Mail characteristic enumeration.
- 2713 - Proposal to support the new addon promotions for 2025 Mailing Promotions

## About Mail.XML Schema Modularization

Today Mail.XML messages are grouped into 8 message types.

- Transportation Messages (TM)
- Mailing Messages (MM)
- Data Distribution Messages (DD)
- Dynamic Payment Template Messages
- Identification Messages (ID)
- Supply Chain Messages (SC)
- Informed Visibility (IV)
- System Messages
- Base: Shared simple types
- Definitions: Shared complex types and elements

The simple types shared across 2 or more modules are found in the Base schema. Likewise, the shared definitions module contains complex type definitions and elements that are shared across 2 or more modules.

## Mail.XML Module Versioning Rules

The following versioning rules will be followed:

The Mail.XML wrapper schema\*\*(.xsd) will always be given the next higher version number (or Errata designation) when any update is made to base, defs or any module. The name of the .xsd file will indicate the new version and the new version number will be used in the namespace and target declarations:

```
xmlns:mailxml="http://delivery-tech.org/Specs/mailxml27.0/mailxml"
targetNamespace="http://delivery-tech.org/Specs/mailxml27.0/mailxml"
```

- When updates are made, only those modules that are updated will be given the next higher version number (or Errata letter designation).
- If updates are made to the base or defs, then the base and defs xsds will be given the next higher version number (or Errata designation) and all modules that call to them will also be given the next higher version number (or Errata designation).

For example:

- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.org/Specs/mailxml27.0A/mailxml" then at least one of the XSDs is at same version such as filename = 'Mail.XML\_27.0A.xsd' <- Errata A
- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.org/Specs/mailxml27.0B/mailxml" then at least one of the XSDs is at same version such as filename = 'Mail.XML\_27.0B.xsd' <- Errata B
- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.

org/Specs/mailxml27.0/mailxml" then at least one of the XSDs is at same version such as  
filename ='Mail.XML\_27.0.xsd' <- Major Version

## Mail.XML 27.0 XSD Modules

The following Mail.XML XSD modules/namespaces are used:

- Mail.XML\_tm.xsd: This module contains all the transportation (or FAST) messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_tm:
- Mail.XML\_mm.xsd: This module contains all the mailing messages (eDoc) and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_mm:
- Mail.XML\_iv.xsd: This module contains informed visibility messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_iv:
- Mail.XML\_dd.xsd: This module contains all the data distribution messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_dd:
- Mail.XML\_id.xsd: This module contains all the identification messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_id:
- Mail.XML\_sc.xsd: This module contains all the supply chain messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML\_sc:
- Mail.XML\_defs.xsd: This module contains all the common definitions of attributes, elements and complex types that are used across two or more message types. Namespace=Mail.XML\_defs:
- Mail.XML\_base.xsd: This module contains simple types that are shared across two or more modules that make up Mail.XML. These can be considered a building block for any message group. Namespace=Mail.XML\_base:
- Mail.XML.xsd: This module contains the system messages of Mail.XML and is used to build custom profiles for Mail.XML. Namespace=Mail.XML:

## The Mail.XML™ 27.0 Messaging Documentation Set

The Mail.XML Messaging Specification has been organized into a set of documents. This *Schemas Specification* is one document in a set of documents that make up the Mail.XML Specification 27.0. Updates in this Specification are NOT backwardly compatible with previous versions. Other documents in the specification set include:

- Mail.XML™ 27.0: Transportation Messaging Specification documents all transportation messages
- Mail.XML™ 27.0: Mailing Messaging Specification documents all mailing messages
- Mail.XML™ 27.0: Informed Visibility Specification documents all informed visibility messages
- Mail.XML™ 27.0: Data Distribution Messaging Specification documents all data distribution messages
- Mail.XML™ 27.0: Identification Messaging Specification documents all identification messages
- Mail.XML™ 27.0: Supply Chain Messaging Specification documents all supply chain messages
- Mail.XML™ 27.0: System Messaging Specification documents all systems and fault messages
- Mail.XML™ 27.0: Simple Types Specification documents all simple types used across Mail.XML messages
- Mail.XML™ 27.0: Common Definitions Specification documents all shared elements and complex

- types.
- Mail.XML™ 27.0: Schemas contains the .XSDs that make up the Mail.XML Messaging Specification

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# Schema mailxml\_sc\_27.0.xsd

schema location: [..\XSDs\mailxml\\_sc\\_27.0.xsd](#)  
attributeFormDefault: **qualified**  
elementFormDefault: **qualified**  
targetNamespace: **[http://delivery-tech.org/Specs/mailxml27.0/mailxml\\_sc](http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc)**

## Elements

[ContainerStatusDelivery](#)  
[ContainerStatusNotification](#)  
[ContainerStatusQueryRequest](#)  
[ContainerStatusQueryResponse](#)  
[OriginalContainerLinkageCancelRequest](#)  
[OriginalContainerLinkageCancelResponse](#)  
[OriginalContainerLinkageCreateRequest](#)  
[OriginalContainerLinkageCreateResponse](#)  
[PostageAdjustmentCreateRequest](#)  
[PostageAdjustmentCreateResponse](#)  
[SiblingContainerCancelRequest](#)  
[SiblingContainerCancelResponse](#)  
[SiblingContainerCreateRequest](#)  
[SiblingContainerCreateResponse](#)

## Complex types

[CSQBlockType](#)  
[linkageType](#)  
[linkingContainerIDType](#)

## Simple types

[adjustmentStatusType](#)  
[adjustmentType](#)  
[containerInfoIncludedInResponseFlagType](#)  
[creditDebitIndicator](#)



element **ContainerStatusDelivery**

<p>diagram</p>	
namespace	<a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a>
annotation	<p>documentation</p> <p>Delivery of container status data from USPS.</p>

element **ContainerStatusNotification**

<p>diagram</p>	<p><b>ContainerStatusNotification</b> Notification from USPS that a container status information is ready for pickup.</p> <ul style="list-style-type: none"> <li>mailxml_sc:SubmittingParty (required)</li> <li>mailxml_sc:SubmittingSoftware (required)</li> <li>mailxml_sc:PushMessageID (required)</li> <li>Choice of two groups: <ul style="list-style-type: none"> <li>Group 1: mailxml_sc:UserLicenseCode, mailxml_sc:MaildatJobID, mailxml_sc:CustomerGroupID, mailxml_sc:MailingGroupID</li> <li>Group 2: mailxml_sc:CustomerGroupID, mailxml_sc:MailingGroupID</li> </ul> </li> <li>Choice of two elements: <ul style="list-style-type: none"> <li>mailxml_sc:AvailableRecordCount</li> <li>mailxml_sc:CSQBlockType</li> </ul> </li> <li>mailxml_sc:NotificationDate (required)</li> </ul>
namespace	<a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a>
annotation	<p>documentation</p> <p>Notification from USPS that a container status information is ready for pickup.</p>

element **ContainerStatusQueryRequest**

<p>diagram</p>	
<p>namespace</p>	<p><a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a></p>
<p>annotation</p>	<p>documentation Query request for container status.</p>

element **ContainerStatusQueryResponse**

<p>diagram</p>	<p>The diagram illustrates the structure of the <b>ContainerStatusQueryResponse</b> element. It features a main box labeled <b>ContainerStatusQueryResponse</b> with the description "Query response for container status." Below this box, a line leads to a large container box labeled <b>attributes</b>. Inside the <b>attributes</b> box, there is a group box labeled <b>grp mailxml_defs:LargeTransa...</b> which contains six sub-elements: <b>mailxml_defs:MessageGroupID</b>, <b>mailxml_defs:TotalMessageCount</b>, <b>mailxml_defs:MessageSerialNu...</b>, <b>mailxml_defs:TransmittedRecor...</b>, <b>mailxml_defs:TotalRecordsAcro...</b>, and <b>mailxml_defs:LastMessage</b>. To the right of the <b>attributes</b> box, a line leads to a box containing two elements: <b>mailxml_sc:TrackingID</b> and <b>mailxml_sc:SubmitterTrackingID</b>. Below these, a line leads to a box containing two elements: <b>mailxml_sc:QueryResults</b> and <b>mailxml_defs:QueryError</b>. The <b>QueryError</b> element has a description: "Error issued when the query data cannot be provided."</p>
namespace	<a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a>
annotation	<p>documentation</p> <p>Query response for container status.</p>

element **OriginalContainerLinkageCancelRequest**

diagram	<p>The diagram shows the structure of the <b>OriginalContainerLinkageCancelRequest</b> element. It consists of a root box labeled <b>OriginalContainerLinkageCanc...</b> with the description "Request to cancel the link between an original container to a sibling container." This root box is connected to a container box. Inside this container box, there is an <b>attributes</b> group containing a <b>grp mailxml_defs:MailXMLHe...</b> group. This group contains four attributes: <b>mailxml_defs::CustomerGroupID</b>, <b>mailxml_defs::MailingGroupID</b>, <b>mailxml_defs::MaildatJobID</b>, and <b>mailxml_defs::UserLicenseCode</b>. Additionally, the container box is connected to a sequence box (indicated by a circle with three dots) which contains four elements: <b>mailxml_sc:SubmittingParty</b>, <b>mailxml_sc:SubmittingSoftware</b>, <b>mailxml_sc:SubmitterTrackingID</b>, and <b>mailxml_sc:CancelLinkage</b>. The <b>CancelLinkage</b> element has a cardinality of <b>1..∞</b>.</p>
namespace	<a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a>
annotation	<p>documentation</p> <p>Request to cancel the link between an original container to a sibling container.</p>

element **OriginalContainerLinkageCancelResponse**

diagram	<p>The diagram shows the structure of the <b>OriginalContainerLinkageCancelResponse</b> element. It consists of a root box labeled <b>OriginalContainerLinkageCanc...</b> with the description "Response to the request to cancel the link between an original container to a sibling container." This root box is connected to a container box. Inside this container box, there is a sequence box (indicated by a circle with three dots) which contains two elements: <b>mailxml_sc:TrackingID</b> and <b>mailxml_sc:SubmitterTrackingID</b>. Additionally, the container box is connected to another sequence box (indicated by a circle with three dots) which contains two elements: <b>mailxml_sc:OriginalContainerLi...</b> and <b>mailxml_sc:OriginalContainerLi...</b>.</p>
namespace	<a href="http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc">http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc</a>
annotation	<p>documentation</p> <p>Response to the request to cancel the link between an original container to a sibling container.</p>

element **OriginalContainerLinkageCreateRequest**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	<p>documentation</p> <p>Request to link an original container with a sibling container.</p>

element **OriginalContainerLinkageCreateResponse**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	<p>documentation</p> <p>Response to the request to link an original container with a sibling container.</p>

element **PostageAdjustmentCreateRequest**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Request to create a postage adjustment.

element **PostageAdjustmentCreateResponse**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Response to a request to create a postage adjustment.

element **SiblingContainerCancelRequest**

diagram	
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namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Request to cancel a sibling container.

#### element **SiblingContainerCancelResponse**

diagram	<p>The diagram shows the structure of the <b>SiblingContainerCancelResponse</b> element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (oval with three dots). The sequence starts with a <b>mailxml_sc:TrackingID</b> element (dashed box). This is followed by a <b>mailxml_sc:SubmitterTrackingID</b> element (dashed box). Finally, there is a group of one or more (1..∞) <b>mailxml_sc:SiblingContainerCa...</b> elements (solid boxes).</p>
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Response to a request to cancel a sibling container.

#### element **SiblingContainerCreateRequest**

diagram	<p>The diagram shows the structure of the <b>SiblingContainerCreateRequest</b> element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (oval with three dots). The sequence starts with a <b>mailxml_sc:SubmittingParty</b> element (solid box). This is followed by a <b>mailxml_sc:SubmittingSoftware</b> element (solid box). Then, there is a <b>mailxml_sc:SubmitterTrackingID</b> element (dashed box). This is followed by a group of one or more (1..∞) <b>mailxml_sc:OriginalContainer</b> elements (solid boxes). Finally, there is a group of one or more (1..∞) <b>mailxml_sc:NewSiblingContainer</b> elements (solid boxes). A <b>mailxml_sc:ContainerType</b> element (dashed box) is also shown, connected to the <b>mailxml_sc:NewSiblingContainer</b> group.</p>
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Request to create a uniquely identified sibling container by adding a sibling container to an existing Mail.dat.

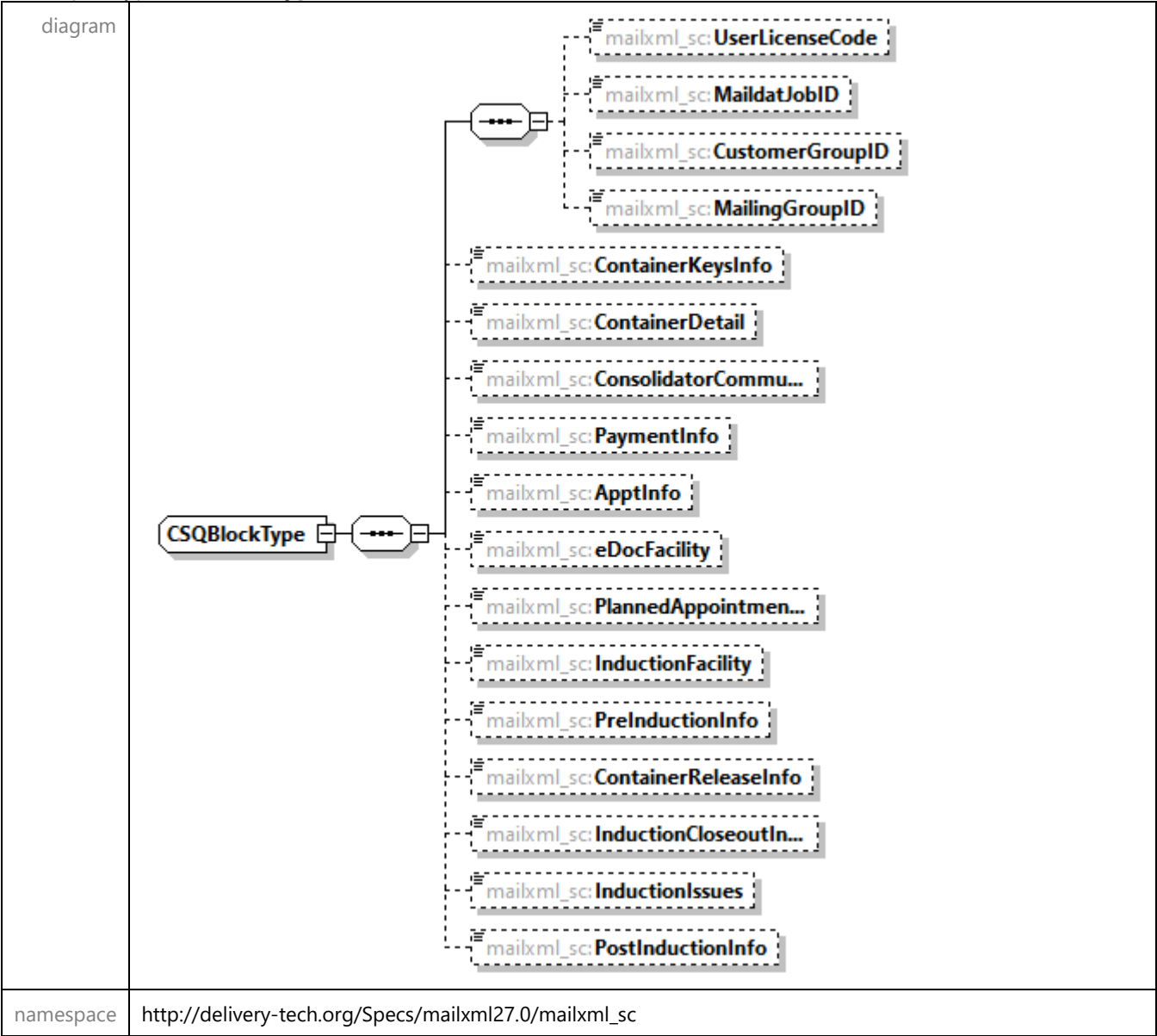
#### element **SiblingContainerCreateResponse**

diagram	<p>The diagram shows the structure of the <b>SiblingContainerCreateResponse</b> element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (oval with three dots). The sequence starts with a <b>mailxml_sc:TrackingID</b> element (dashed box). This is followed by a <b>mailxml_sc:SubmitterTrackingID</b> element (dashed box). Finally, there is a group of one or more (1..∞) <b>mailxml_sc:SiblingContainerCr...</b> elements (solid boxes).</p>
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namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
annotation	documentation Response to a request to create a uniquely identified sibling container by adding a sibling container to an existing Mail.dat

complexType **CSQBlockType**



### complexType **linkageType**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc

### complexType **linkingContainerIDType**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc

### simpleType **adjustmentStatusType**

namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
type	restriction of <b>xs:string</b>

### simpleType **adjustmentType**

namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
type	restriction of <b>xs:string</b>

### simpleType **containerInfoIncludedInResponseFlagType**

namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
type	restriction of <b>xs:string</b>

### simpleType **creditDebitIndicator**

namespace	http://delivery-tech.org/Specs/mailxml27.0/mailxml_sc
type	restriction of <b>xs:string</b>